

ESR #	PI Name	Expires	Status (05/01/2021)	Project	NEPA #	Title	Area(s)	Summary	Physical	Chemical	Environm.	Radiation	Biological	Offside	Others	Monitoring
PO-011-2017	Zhangbu Xu	10/01/21	APPROVED	STAR		STAR detector testing and development	0510-1-227	Activities related to development and testing of detector components that will be used for STAR upgrades	EL, CG, SO, FL							
PO-084-2021	Stephen Boose		SendReview	sPHENIX		sPHENIX Electronic Support	0510-1-91	Conventional electronic assembly and testing techniques are used in support of PHENIX electronics.	EL, SO, FL							
PO-018-2016	Stephen Boose	08/07/21	APPROVED					to be replaced by PO-084-2021								
PO-079-2020-NOV-23	Christian Videbaeck		SendReview	STAR		STAR Electronics Support Group.	0510-1-231, 0510-1-236, 0510-1-238	Perform R&D work on STAR Detector electronics, including maintenance and support.	EL, PT, SO, FL, SH, FA		HW (Spraycans)					
PO-025-2016	John Hammond	08/24/21	APPROVED	STAR		see above		being replaced by PO-079-2020-Nov-23								
PO-087-2021	Hucheng Chen	08/16/21	SendReview	Omega / DUNE		Cryogenic Test of Front End Electronics for LBNE LAr TPC	0510-1-142 (High Bay)	Activities related to the test and evaluation of front end electronics in cryogenic temperature.	CR, EL, SO							
PO-030-2016	Hucheng Chen	08/16/21	APPROVED					to be replaced by PO-087-2021								
PO-031-2016	David Lynn	12/15/21	APPROVED	Omega		Silicon/Electronics Lab for Atlas Upgrade R&D	0510-2-80	Testing of electronics and silicon detectors occurs.	EL, CG, SO, FL			SRS-NA, LAS				
PO-035-2016	Rachid Nouicer	10/22/21	APPROVED	sPHENIX		Intermediate Silicon Tracker (INTT) for sPHENIX Experiment at RHIC	0510-2-211	Testing of the INtermediate Tracker (INTT) is a part of the particle tracking detectors of sPHENIX. The INTT detector consists of four barrel layers of silicon strip detectors.	EL, CG, SO			SRS-NA				
PO-086-2021	Wlodzimierz Gurny	10/29/21	SendReview	RHIC Spin		Detector and data acquisition research and development, RHIC polarimeter detector and DAQ testing, EIC Si detector development.	0510-1-213	The project involves the design, construction and test of primarily silicon and scintillation detectors, detector control and readout, and data acquisition systems for the pp2pp subsystem of the STAR detector at RHIC.	EL, SO, CG			SRS, SRS-NA, LAS				
PO-044-2015	Wlodzimierz Gurny	10/29/21	APPROVED				0510-1-213	to be replaced by PO-086-2021								
PO-0	Millind Diwan		NEW	Electronic Detector Group (EDG)			0510-2-224	to replace PO-048 ...								
PO-048-2015	Millind Diwan	10/15/21	APPROVED / to be replaced	Electronic Detector Group (EDG)		Design, Construction, and Testing of detectors and other mechanical and electrical assemblies to support particle physics experiments.	0510-2-224	design, construct, and test equipment for particle physics experiments and to analyze and publish results of these studies. The current experimental effort is concentrated on neutrino, kaon and muon experiments.	EL, SH, SO, PT, FL, CG	Liquid Scint.	HW (Oils)	LAS				
PO-065-2015	David Lynn	10/15/21	APPROVED	Omega		Assembly of modules for Atlas silicon strip detectors	0510-1-208	Assembling and testing Atlas silicon strip modules. This involves gluing silicon chips to kapton circuits, and gluing kapton circuits to silicon strip detectors. We will electronically test the completed units called modules.	EL, CG							
PO-069-2016	Robert Pisani	10/22/21	APPROVED	sPHENIX		sPHENIX experimental support	0510-2-205-LAB	Support and development for various detectors that are part of future sPhenix experiment at RHIC and general R&D. These include work for the Electromagnetic and Hardronic Calorimeters, Silicon Detectors, Time of Flight prototyping, and any support equipment that may need building and testing.	EL, CG, PT, SO, SH, FL		HW (Epoxy)					
PO-070-2016	Anze Slosar	10/22/21	APPROVED	Astrophysics		BMX Demonstrator	0510-1-127-LAB, 0839-1-1, Overflow Basin #3	Install protpe radio telescope in BNL field area, Overflow Basin #3. Allow flying of Unmanned Aerial Vehicles (UAVs) for calibration purposes.	EL, PT, LA, TM							
PO-082-2020	William Fielitz		SendReview	Omega / DUNE		Short Baseline Neutrino Detector, Deep Underground Neutrino Detector, Atlas	0510-1-216, 0510-1-86	perform electro/mechanical work and cryogenic testing	CR, SH, EL, SO, CG, FL, PV		Oils					
PO-071-2017	Kenneth Sexton	08/15/21	APPROVED			see above		being re-written (PO-082-2020)	0							
PO-072-2018	Craig Woody	08/01/20	APPROVED	sPHENIX	EA-0508	sPHENIX Detector Support and Development - Calorimeter Labs	0510-2-201, 0510-2-236A, 0510-2-82	support and development of the calorimeter prototypes and detectors that are part of the sPHENIX experiment	EL, SO, SH, PT, FL, CG	Lead bricks	HW (Epoxy)	SRS, SRS-NA, LAS, RGD, UV				
PO-083-2018	Craig Woody	08/15/22	APPROVED	sPHENIX	EA-0508	sPHENIX EMCal Factory and Testing	0510-2-81, 0510-2-82, 0510-2-85, 0510-1-142	production, assembly, and testing of components of the sPHENIX electromagnetic calorimeter (EMCal).	EL, SO, FL, CG, ER		HW (Epoxy, mixed metal-epoxy dust)					
PO-074-2018-OCT-10	Hucheng Chen	02/01/22	APPROVED	Omega		ATLAS electronics testing lab	0510-1-203, 0510-1-82	test and certification of the Liquid Argon calorimeter front-end electronics	EL, SO							
PO-075-2018-DEC-20	David Lynn	10/01/21	APPROVED	Omega		Assembly and testing of hybrids, modules, and staves for the ATLAS Silicon Strips Upgrade	0510-1-151, 0510-1-260	assembly space where we will assemble hybrids, modules, and staves	EL, CG, LA			LAS				
PO-076-2018-DEC-21	Manhong Zhao	11/20/21	APPROVED	DUNE		DUNE APA cabling mock up	0902-Annex	build a DUNE APA cabling mockup to practice CE box installation, APA cable routing, and signal penetration chimney installation	LA, ER, PT							
PO-077-2019	Yichen Li	06/25/22	APPROVED	Electronic Detector Group (EDG)		Measurement of Electron Transport Properties in LAr	0510-1-142 (High Bay)	developments and characterization of LAr TPCs	CR, EL, SO, CG, PV			SRS-NA, LAS				
PO-078-2019	Andrei Nomerotski	08/15/21	APPROVED	Cosmology		Time resolved imaging with fast camera	0510-2-225A, 0510-2-225B	Perform characterization of several types of fast imagers using a visible light laser with sub-nsec timing resolution	EL, SO			SRS-NA, LAS				
PO-079-2019	Leslie Bland	08/15/22	APPROVED	STAR		STAR FHC upgrade and detector development.	0510-2-87	testing of photosensors and other Forward Hadron Calorimeter (FHC) upgrades and other detector development	EL, SP, PT, FL							
PO-080-2019	Babak Azmoun	10/15/21	APPROVED	sPHENIX		sPHENIX Detector Support and Development - Gas Detectors	0510-2-198, 0510-2-208	continued support and development of various detectors that are part of the sPHENIX experiment at RHIC and other new detectors which are planned as part of the STAR upgrade programs or for the NEXO neutrino-less double beta decay experiment.	LA, PT, CG, SO, FL, EL	TOM	SF6	SRS, SRS-NA, LAS, RGD, UV				
PO-081-2019	Vladimir Tishchenko	10/15/21	APPROVED	Electronic Detector Group (EDG)		Design, Construction and Testing of detectors and other mechanical and electrical assemblies to support particle physics experiments.	0510-2-233	design, construct, and test equipment for particle physics experiments and to analyze and publish results of these studies. The current experimental effort is concentrated on neutrino, kaon and muon experiments that are currently running or are being proposed to run at sites remote from BNL.	EL, PT, SH, SO, CG, FL			SRS-NA, LAS				

CR = Cryogenics
 EL = Electrical Hazard
 CG = Compressed Gas
 SO = soldering, electronics work
 LA = Ladders, Fall hazards
 SH = Sharps (non-biohazard)
 PT = Power Tools
 PV = Pressured Vessel
 TM = Extreme Temperature (Hot or Cold)
 ER = Ergonomics and Material handling

 HW = Hazardous Waste
 TOM = Toxic metals (e.g., As, Ba, Be, Cd, Cr, Hg, Pb, Se, Ag)

 SRS = Sealed Radioactive Source
 SRS-NA = Sealed Radioactive Source non-accountable
 LAS = Lasers
 RGD = Radiation-generating devices Exempt Non-Exempt

 FL = Flammable Liquids
 FG = Flammable Gas